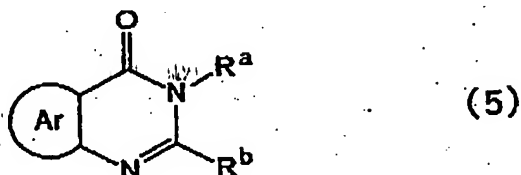


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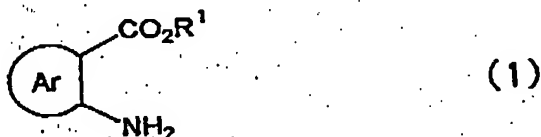
WHAT IS CLAIMED IS:

1. A method for preparing a pyrimidin-4-one compound having the formula (5);



in which Ar represents an aromatic hydrocarbyl or heterocyclic ring optionally having a substituent,  $R^a$  represents hydrogen or a hydrocarbyl group, and  $R^b$  represents an atom or a group which does not participate in the below-mentioned reaction, provided that  $R^b$  is other than hydrogen where  $R^a$  is hydrogen;

which comprises reacting an aminoarylcarboxylic acid compound having the formula (1):



in which Ar has the above-mentioned meaning, and  $R^1$  represents hydrogen or a hydrocarbyl group;

with an organic acid compound having the formula (4):



in which  $R^3$  represents a hydrocarbyl group, and  $R^b$  has the above-mentioned meaning;

in the presence of a nitrogen atom-containing compound having the formula (2) or (3):

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 $R^aNH_2$  (2) $R^2CO_2NH_3R^a$  (3)

5 in which  $R^2$  represents hydrogen or a hydrocarbyl group,  
and  $R^a$  has the above-mentioned meaning.

2. The method of claim 1, in which the reaction is  
performed in an organic solvent.

10 3. The method of claim 2, in which the organic  
solvent is a polar solvent.

4. The method of claim 3, in which the polar sol-  
vent is a lower alcohol having 1 to 6 carbon atoms.

15 5. The method of claim 1, in which the nitrogen  
atom-containing compound is an amine compound or ammonium  
acetate.

20 6. The method of claim 1, in which the reaction is  
performed at a temperature in the range of 40 to 200°C.

25 7. The method of claim 1, in which Ar is a 5- or  
6-membered aromatic hydrocarbyl ring optionally having a  
substituent.

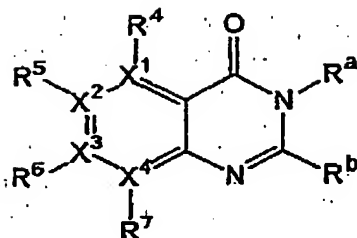
8. The method of claim 1, in which Ar is a 5- or  
6-membered aromatic heterocyclic ring optionally having a  
substituent.

30 9. The method of claim 1, in which the pyrimidin-  
4-one compound has the formula (7):

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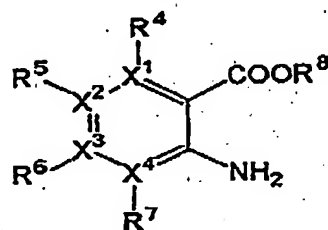
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(7)

in which each of  $R^a$  and  $R^b$  has the meaning defined as above, each of  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  independently represents an atom or a group which does not participate in the reaction, provided that  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  can form a ring in optional combinations, and each of  $X^1$ ,  $X^2$ ,  $X^3$  and  $X^4$  independently represents a carbon atom or a nitrogen atom, provided that, where any of  $X^1$ ,  $X^2$ ,  $X^3$  and  $X^4$  are nitrogen atoms, the nitrogen atoms do not have the atom or group thereon,

and the aminoarylcarboxylic acid compound is an aminocarboxylic acid compound having the formula (6):



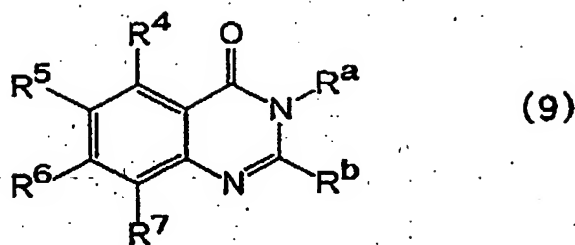
(6)

in which each of  $X^1$ ,  $X^2$ ,  $X^3$ ,  $X^4$ ,  $R^4$ ,  $R^5$ ,  $R^6$ , and  $R^7$  has the meaning defined as above, and  $R^8$  represents an atom or a group which does not participate in the reaction.

10. The method of claim 1, in which the pyrimidin-4-one compound is a quinazolin-4-one compound having the formula (9):

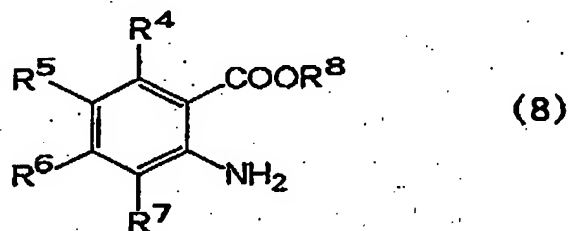
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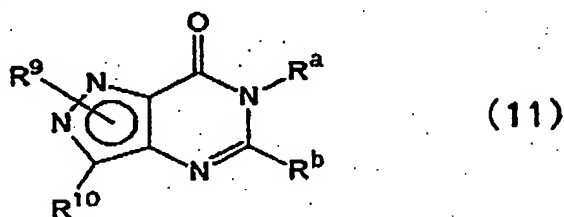
10 in which each of  $R^a$  and  $R^b$  has the meaning defined as above, each of  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  independently represents an atom or a group which does not participate in the reaction, provided that  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  can form a ring in optional combinations,

15 and the aminoarylcarboxylic acid compound is an anthranilic acid having the formula (8):



25 in which each of  $R^4$ ,  $R^5$ ,  $R^6$ , and  $R^7$  has the meaning defined as above, and  $R^8$  represents an atom or a group which does not participate in the reaction.

30 11. The method of claim 1, in which the pyrimidin-4-one compound is a pyrazolopyrimidin-7-one compound having the formula (11):

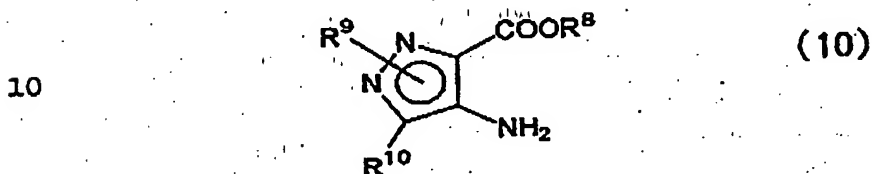


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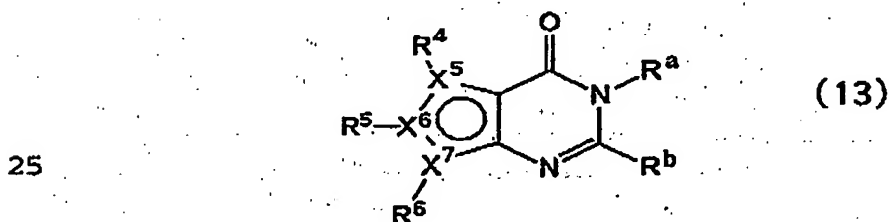
in which each of  $R^a$  and  $R^b$  has the meaning defined as above, each of  $R^9$  and  $R^{10}$  independently represents an atom or a group which does not participate in the reaction, provided that  $R^9$  and  $R^{10}$  can form a ring in combination,

5 and the aminoarylcarboxylic acid compound is an aminopyrazolcarboxylic acid having the formula (10):



15 in which each of  $R^9$  and  $R^{10}$  has the meaning defined as above, and  $R^8$  represents an atom or a group which does not participate in the reaction.

20 12. The method of claim 1, in which the pyrimidin-4-one compound is a thienopyrimidine compound having the formula (13):



30 in which each of  $R^a$  and  $R^b$  has the meaning defined as above, each of  $R^4$ ,  $R^5$ , and  $R^6$  independently represents an atom or a group which does not participate in the reaction, provided that  $R^4$ ,  $R^5$ , and  $R^6$  can form a ring in optional combinations, and at least one of  $X^5$ ,  $X^6$  and  $X^7$  represents a sulfur atom, and other is carbon atom, provided that, where any of  $X^5$ ,  $X^6$  and  $X^7$  are sulfur atoms,

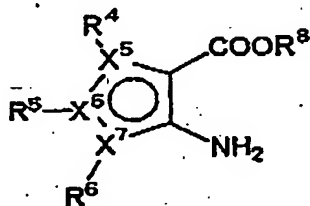
35 the sulfur atoms do not have the atom or group thereon, and the aminoarylcarboxylic acid compound is an

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aminothiophenecarboxylic acid compound having the formula  
(12):

5



(12)

- 10 in which each of  $\text{X}^4$ ,  $\text{X}^5$ ,  $\text{X}^6$ ,  $\text{R}^4$ ,  $\text{R}^5$ , and  $\text{R}^6$  has the meaning defined as above, and  $\text{R}^8$  represents an atom or a group which does not participate in the reaction.

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